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Black History

One effect of Black History Month is that it helps sensitize us to the special difficulties and unique opportunities in identifying and preserving sites associated with Black Americans, and to the issues facing those who must manage, interpret and protect these cultural resources. As the role of Black Americans in our culture gets special recognition during this time, part of this commemoration is appropriately focused on achievements in the area of historic preservation.

Several efforts can be cited to illustrate the Service's commitment to ethnic and minority preservation and interpretation: the National Historic Landmarks program—working with the states and local preservation commissions—is conducting a theme study on ethnic and minority history that will identify additional NHLs associated with Black history; the National Register of Historic Places is working closely with Black colleges and universities to list significant properties on the Register; the Historic American Buildings Survey/Historic American Engineering Record is increasing its recruitment efforts at Black colleges; the NPS has signed a cooperative agreement with the Afro-American Institute for Historic Preservation and Community Development, to develop options for long-term preservation and use of Black NHLs, to evaluate NPS interpretation of the Black experience in park units, and to do NHL studies; and the NPS has joined the National Trust for Historic Preservation in the Trust's Minority Heritage Preservation Task Force.

On the local level, National Capital Parks-East, working with the government of the District of Columbia, has developed a Black History National Recreation Trail that features sites *com*memorating important Black Americans; at the Maggie L. Walker National Historic Site in Richmond, VA, the park is using the results of an interdisciplinary study by Howard University to more accurately interpret Maggie Walker (see *CRM Bulletin, Vol.* 10, No. l); and the NPS, in cooperation with the University of Maryland-Eastern Shore, sponsored a symposium on interpretation of slavery.

In considering how best to observe Black History Month in the *CRM Bulletin,* the editors felt that rather than feature Black history in one edition of the *Bulletin* during the month of February, we would devote more time and space to address the key issues associated with this topic in a series of articles over the next year. The series begins with a photo essay in this issue (see center spread). Future articles are expected to encompass a range of topics, some of which are listed below.

- interpretation of cultural resources in the NPS associated with Black Americans
- organizations and activities concerned with preservation of Black sites outside the National Park System
- gentrification, displacement and other economic concerns
- visitation to parks associated with Black Americans
- Black community efforts in historic preservation

• Black professionals in historic preservation

• measures to promote the relevance of Black historic preservation to both Black Americans and the Nation as a whole

The *Bulletin* will feature articles from NPS authors as well as members of the Black community at the state and local levels, educators, and practitioners. The editors encourage your contributions and suggestions for this series of articles.

Historical Archeology

The Fort Union Reconstruction Archeology Project

William J. Hunt, Jr.

During the late 1820s and early 1830s, the fur trade on the Upper Missouri and in the Rocky Mountains was quickly giving way under an array of new economic forces. As these changes took shape, a new economic order flowered in the wilds of the Far West which centered on a new product, gathered and prepared by exclusive producers and intended for an entirely different market—the domestic American economy rather than for export. Increasingly, fur traders placed greater emphasis upon the bison and bison robes.

In response to the burgeoning trade in bison skins, a new enterprise arose on the American frontier. This was the Upper Missouri Outfit, or UMO for short, a conglomerate of experienced traders and forts which represented the most western arm of John Jacob Astor's powerful American Fur Company.

Kenneth McKenzie, a company trader and part-owner, recognized the potential of the site at the confluence of the Yellowstone and Missouri rivers (about where the Montana-North Dakota state boundary is situated today), and in October of 1828 or 1829, ordered that a trading post be built there. In addition to acting as the UMO center of operations, this facility, known as Fort Union, also served as the principal American trading post for the Assiniboin Indians. Through its various subsidiary posts and wintering houses, it was also engaged in trade with the Sioux, Plains Cree, Blackfoot, Crow, and other natives in the Northern Plains.

By 1867, Fort Union was a mere shadow of its glorious past. No longer economically viable, the crumbling ruin was sold to the United States Government for building materials to aid in the construction of the Army's new Fort Buford. By 1868, it was gone.

In 1965, Fort Union was recognized by Congress as a site of major significance to the understanding and interpretation of American history. With this recognition, the archeological site was included in the National Park System as Fort Union Trading Post National Historic Site.

In December of 1985, Congress appropriated funds for the reconstruction of Fort Union. Before this could take place, however, additional information was required for each of these structures. Previous historic research had largely exhausted the primary documentary record letters, journals, illustrations, and business records as a source of information. It was clear that additional data about structure sizes and construction methods could only be obtained through archeology. To provide this information, the Midwest Archeological Center (MWAC) initiated a series of large-scale excavations beginning in the summer of 1986. An investigative team was established and a scope of work was developed to meet the various needs. The scope of work addressed a number of specific points relating to Fort Union architecture. These related to the size of primary and secondary structures expected to be encountered; their locations within the site; methods of construction employed historically; as well as the location of gravel paths and wooden walks, fences, wells, and latrines.

The mitigation of the construction impacts upon the cultural resources also offered MWAC archeologists, and others interested in the Indian trade, a unique investigative opportunity. This would provide information from which one could study the robe trade and the people involved in it, and this from a perspective not offered by historical documents, i.e., by examining the "fossilized" residue of its occupants' activities and actions. Best of all, there was the potential of looking at the common, generally illiterate people at the fort (the Indians, the lower status employees, and their families) from a point of view not biased by the upper class perspectives of literate clerks, bourgeois, and fort visitors.

Excavation

The archeological tasks which lay ahead were formidable and resulted in the largest excavation ever conducted on a single site by MWAC. Between May of 1986 and September of 1988, MWAC crews spent over 12 months excavating at Fort Union. These were an interesting blend of professional excavators and volunteer laborers. This project was deeply involved in the NPS Volunteer in Parks (VIP) program, with over 150 volunteers from all over the country spending one or more weeks working at the site. Virtually none of these had archeological experience. Nevertheless, they showed a great deal of drive and dedication, sticking it out even under the extremely hot (often over 100° F) and dirty conditions common at the Fort Union site. The amount of labor contributed was considerable and was one of the primary factors ensuring the success of the project as a whole.

During the three field seasons, approximately 40,000 sq. ft. of the site was excavated inside and outside the fort palisades. Several innovations were introduced to the field work to increase the efficiency of this large scale undertaking. These concentrated upon the processes used to recover artifacts, record excavation information, and production of site maps.

To promote rapid recovery of artifacts, two large, motorized screening machines were used. These were nothing more than slightly modified, commercially manufactured, agricultural grain cleaners. Soil excavated from the site was shoveled into one end of a machine's 3 feet diameter rotating drum. This drum was covered with a skin of 1/4 inch mesh hardware cloth which allowed the dirt to fall through the screens while retaining the artifacts inside. As the drum revolved, artifacts rolled gently through and were deposited in a bucket set at the opposite end. Usually, excavation and manual screening can involve two to three people. At Fort Union, the use of the screening machines enabled artifacts to be removed from the soil in only about 10% of the time. This much increased processing time allowed each crew member to maximize their time spent excavating and recording information.

Computers were used to reduce the time required in recording excavation information. Small lap computers were used on the site to catalog artifacts, log photographs, and write descriptive overviews of excavations as they were in progress. All documentation was more or less in its final form at the time it was entered, in contrast to the traditional methods where handwritten notes are transcribed by a typist. The use of field computers also made the final site notes more accurate because no errors could be introduced in a transcription process. Larger, portable computers were used to prepare weekly reports, making excavation information available almost immediately to interested state and Federal authorities. In the winter, these computers were used to prepare reports describing the methods and results of the previous field season's efforts.

One of the most time-consuming aspects of archeological work is the production of site maps which show the locations of all excavations and the cultural features (fireplaces, trash pits, structures, etc.). Usually these are hand drawn from the field notes after the crew has returned from the field. Any mistakes made during this process often result in a complex map having to be completely redrafted. This changed in 1988, when a computerized drafting system was moved into the basement of the newly constructed Bourgeois House. This revolutionized the drafting process, allowing complex field maps to be produced on-site as the excavations took place. Maps generated in this way can be edited and corrected almost instantaneously in comparison with the laborious methods used prior to this. New maps can be generated and printed to any scale. They can be produced in black and white or in color almost immediately thereafter and are of a quality suitable for inclusion in the final printed report.

Prior to beginning each season of excavation, several of the major structures scheduled for reconstruction were targeted for investigation. In 1986, the Bourgeois House, Kitchen and a portion of the North Palisades were examined. During the 1987 fieldwork, crews investigated the southwest Bastion, Northeast Bastion, East Palisades,

North Palisades, and North Gate. By 1988, only the areas associated with the South Palisade, West Palisade, Main Gate, and Indians' and Artisans' House were left to be examined.

As excavations took place, MWAC archeologists were able to assist the timeliness of the reconstruction process by insuring that Rocky Mountain Regional Office (RMRO) architects had structural information as soon as possible. Often, this was transmitted the same day that it became available. Preparation of accurate reconstruction plans was further aided by making fixtures, paint chips and other relevant objects available almost immediately after discovery. In 1986, these measures insured that construction was able to begin on the Bourgeois House, the first building to be erected, within a few weeks of completing that structure's archeological investigation.

In addition to structures scheduled for reconstruction, MWAC archeologists discovered at least three major structures for which very little or no information was available in the historic document for Fort Union. In 1987, a large building was partially exposed between the Store Range and the East Palisades. Until an analysis of the artifacts and excavation data takes place, however, archeologists will not be able to determine with certainty the manner in which this building was used. It appears to be associated with the Store Range, however, and may have been used to warehouse bison robes, furs, trade goods, and other fort supplies. Two other structures were discovered in 1988 under the Indians' and Artisans' House. The deepest (and therefore earliest) was Fort Union's original blacksmith shop, a building whose general location was identified by Prince Maximilian in 1833. Above this was another structure whose western half contained a gunsmith shop. This building may have been in existence sometime in the 1840s and may be a structure identified in 1843 by Edwin Denig, the bourgeois of the fort at that time.

Analysis

MWAC archeologists also discovered the remains of a number of secondary structures during their investigations, many of which were either previously unidentified or their locations were uncertain. Among these were the remains of the palisade bracing, a dairy, the North Gate, Army-era (post-1864) storerooms, three (post-1863) privies, a shallow basement for an unidentified (ca. 1830s) structure, charcoal house for the post-1833 blacksmith shops, horse stables, a possible corral, a late 1850s saw mill. A number of other small structures were also recorded whose function can not be ascertained at present.

Along with evidence for various structures and buildings, hundreds of thousands of objects were found which had been lost or discarded by Fort Union's inhabitants. This garbage and debris, left behind by employees and visitors to the post, can tell us much about the quality of life there. These have been removed to the MWAC archeological laboratory in Lincoln, Nebraska, for cleaning and analysis. Common items stored there include glass and metal containers; gun parts and ammunition; ceramic dinnerware; tools for making and repairing objects of wood and metal; building materials; clothing items; glass beads and decorated ceramic tobacco pipes of almost infinite variation.

Most of the structures and artifacts relate, of course, to the employees of the UMO and their families. However, a significant proportion of the artifacts and hundreds of the cultural features (fire hearths, pits, post holes) are related to the site's Native American occupants. During the last year of MWAC's work at Fort Union, it was discovered that a significant component of the site was related to prehistoric Indians. The artifacts (pottery, stone arrow points, and other stone tools) indicate that people related to North Dakota's earth lodge dwellers occupied the terrace edge sometime between AD 1400-~700. The lack of evidence for permanent structures and the widely scattered artifacts suggest that this component of the Fort Union site may represent a temporary encampment, where Indians may have lived in skin tents during spring or fall buffalo hunts.

One hundred and twenty years later, Indians continued to come to the Fort Union site, this time to trade the fruits of their hunt for merchandise manufactured in Europe and the eastern United States. MWAC archeologists were not too surprised to find considerable evidence for historic Indians both inside and outside of Fort Union's palisades. Inside the fort, this evidence consisted of earrings, copper wire bracelets, finger rings, stone and clay pipes, fragments of trade muskets, game markers, and beaded clothing. Although many of these may relate to the fort's employees' Indian wives, others may be attributed to the large numbers of Native Americans who came to trade at the post. Some of the objects found inside the post may have been broken or lost by the headmen of these visiting bands since they and their immediate families were commonly allowed inside the fort to live with their families during their stay. Those of lower status usually remained outside the palisades. Evidence for their encampments were suggested during the 1986 excavations when numerous fire pits, post holes, and trash pits were discovered north of the fort. Similar features were identified immediately south of the Northeast Bastion in 1987 and * is probable that such features may cover the greater portion of the terrace top in the vicinity of Fort Union.

This winter, the physical rebirth of Fort Union entered its final stages with the resurrection of the palisades, bastions and trade house. Historical archeologists at MWAC are only at the beginning of their research into frontier life at Fort Union, however, for the archeological project is only now entering into the most important aspect of its work. Now that the field work has been completed, researchers at MWAC are faced with the monumental prospect of processing, analyzing and curating the tremendous number of artifacts and excavation records generated by the reconstruction project. Since the resumption of field work at Fort Union in 1986, a small laboratory crew has been processing (washing, drying, sorting, stabilizing, and curating) the recovered materials. This task is so large that it is expected to continue into 1990, given the current levels of funding. Before this work is completed, however, MWAC archeologists will be engaged in an intensive research effort which is directed toward and based upon the artifacts, excavation records, and historic documents. This effort will focus upon many of the research issues identified in the 1986 scope of work and result in the generation of a number of documents for internal NPS use and various publications intended for public consumption. The documents prepared by MWAC will provide the NPS with information useful for understanding and interpreting Fort Union, and similar sites within the NPS system, to the public. Publications generated from these documents will also address the concerns of the public interested in historic archeology, the Indian trade, and myriad things of everyday life. In this way, the archeology of Fort Union, only partially understood now to the few specialists who excavated the site, will become understandable to a broader audience of scientists, historians, park planners, interpreters, and the general public.

William Hunt is supervisory archeologist at the Midwest Archeological Center in Lincoln, NE.

AutoCAD and Fort Union Trading Post: The Field Application of a Computer Aided Drafting Program

Bill R. Chada

The 1988 excavation season marked the first time the Midwest Archeological Center field tested a computer aided drafting program. This article deals with the use of AutoCAD Drafting Package, a computer aided drafting (CAD) program and its viability for field applications. AutoCAD has been used by the Midwest Archeological Center in the laboratory for other projects but in 1988 computer graphics came to Fort Union Trading Post NHS.

Fort Union Trading Post National Historic Site is located near the confluence of the Missouri and Yellowstone rivers in what is now western North Dakota. It was a major frontier trading post built by John Jacob Astor's American Fur Company in 1829 and operated into the 1860s.

Introduction to AutoCAD

In 1983, the Autodesk Corporation of Sausalito, California released AutoCAD Drafting Package. This computer aided drafting program, used for general purpose drafting applications, has no limit to the types of line drawings it creates. AutoCAD can create any drawing created by hand. Specific applications often recognized with AutoCAD include architectural, electronic, and mechanical drawings. The AutoCAD Drafting Package Reference Manual (1986: Preface) lists many applications for AutoCAD. Among them are several which relate to archeology very well. Applications include constructing work-flow charts, graphs of all kinds, topographic maps, architectural drawings, and technical illustrations.

AutoCAD uses MS-DOS operating system and requires no technical computer knowledge to operate. This ease and speed of operation makes AutoCAD very useful. No longer is it necessary to wait until after leaving the field to create a site map. With usage in the field and in the laboratory, small laptop and personal computers are creating site maps and various illustrations of publishable quality.

When drawing with AutoCAD, data entry is carried out via the computer keyboard, a mouse, a digitizing tablet or several other devices. The precision of the data will vary greatly depending on the device used. Using a digitizing tablet will be far more accurate than using a mouse. Entering the exact coordinates using the computer keyboard instead of a digitizing tablet will ensure a precise location of an object. The computer keyboard and a digitizing tablet were used at Fort Union.

AutoCAD drawings consist of multiple drawing layers. These layers help to classify entities within a drawing. Layer names and contents vary with each drawing. There is no limit to the numbers of layers a drawing may have. Layers may be displayed all at once, one layer at a time, or any combination of layers may be displayed and/or printed. Several examples of the types of maps generated from just one drawing are given. Figure 1 deals with the excavation blocks from the 1986-1988 field seasons. By adding another layer to the drawing, we are able to locate the 1830s palisade and bastions, as seen in Figure 2. Figure 3 displays AutoCAD's ability to handle complex drawings.

This is the plan view of the Indians' and Artisans' House and the Main (south) Gate area of the fort. This area is located in the 1988 excavation blocks 19, 20 and 21.

Another AutoCAD advantage is the ability to create 3-Dimensional drawings. A 3-D drawing is nearly as easily created as a 2-D drawing. The difference in drawing the 3-D image is the entering of the elevation and thickness for each point of an entity. 2-D drawings have a program default elevation and thickness set prior to the drawing of each entity. All of the Fort Union drawings are in 3-D.

When viewing 3-D drawings, the use of AutoCAD's View Point Command becomes important. AutoCAD has the capabilities to rotate a drawing 360 degrees vertically and 90 degrees horizontally. This enables views of the drawing from the plan view, profile or any angle in between. The drawings are also rotated and viewed from any direction (i.e., north, south, east, west or any variation). Any combination of vertical and horizontal angles are viewed and/or printed. Close-ups of any area of the drawings are also possible. These close-ups, acting very similar to the zoom lens of a camera, will give maps details that other views may miss.

Examples of 3-D drawings may be seen in Figures 4-7. These drawings are taken from the 1988 excavation unit N1007/E1042. The drawing represents the base of the 1829 palisade. Figure 4 displays the plan view of the excavation unit. A 3-D plan view appears identical to a 2-D drawing but the 3-D image becomes apparent when the drawing view point is changed. Examples of how AutoCAD drawings may be rotated to obtain different view points is seen in Figures 5-7.

Field Application

Presently, Fort Union has one modern reconstructed building (Bourgeois House) which houses the museum and administrative offices. This controlled environment was the location for the AutoCAD drafting equipment but AutoCAD neither requires nor limits itself to this. Hardware requirements for the 1988 field season included an IBM compatible computer with a 40 megabyte hard disk. A 12x18" digitizing tablet, a graphics printer and a six-color plotter were also employed.

There are many advantages for having AutoCAD in the field during excavations. Some of these advantages for this on-site mapping include developing weekly progress report maps for the use of the Rocky Mountain Regional Office. Like many sites, data recording errors are occasionally made by the excavators but with in-field mapping capabilities field errors are quickly corrected without any loss of data. The ability to question the excavator or to visually inspect the problem excavation units allows for quick corrections.

The disadvantages of using the AutoCAD system in the field include the protection of the hardware itself. Most equipment requires a dirt and moisture free environment which is sometimes difficult to obtain in the field. The power supply sometimes is lacking. Batteries which power the computer, at present only operate about 1-3 hours before requiring recharging. Another problem which occurred at Fort Union concerned the inability of data entry to keep pace with the excavators. There was one data entry person and at least 40 excavators at any one time generating level forms and maps. On smaller sites or sites with smaller crews this problem may not have occurred, but like many other situations, a bottleneck was created with too much information to be processed by only one individual. Fort Union was a good test case for proving the value and limitations of the program and hardware.

We learned AutoCAD has the ability to manipulate all types of data and it can create nearly an infinite number of maps from a single drawing. AutoCAD demonstrates a versatility of problem resolution with respect to archeological field situations.

The Fort Union Trading Post was the first and hopefully just the beginning of continued on-site use of AutoCAD on National Park Service archeological projects.

Bill Chada is an archeologist at the Midwest Archeological Center in Lincoln, NE.

Research Benefits Management: A Case Study

Jill York O'Bright

When Norman D. Hellmers assumed the Superintendency of Lincoln Boyhood National Memorial in Spencer County, Indiana, in August 1981, lightning struck. Literally and figuratively.

A late summer thunderstorm resulted in the destruction of one of several 50-year-old tulip poplars which lined the grassy allee leading toward the grave of Abraham Lincoln's mother. The park maintenance staff cut the tree down. None of this was unusual. Superintendent Hellmers' response to the situation was.

This is the story of a Superintendent who saw a problem others before him had not seen, and did not walk away. It tells how he determined to restore a resource, how he worked with others to obtain the information he needed to accomplish the restoration, and how his park benefited from the research project. This is the story of the re-establishment of the formally landscaped grounds of Lincoln Boyhood National Memorial.

When Hellmers asked the maintenance crew how the park generally went about replacing missing trees, he learned replacement of missing specimens was not common practice. Large gaps interrupted the pattern of sycamores, tulip poplars, and dogwoods. The few red oaks gracing the parking plaza between the memorial building and the allee suggested a once-formal arrangement, but because so many oaks were missing the original pattern was difficult to determine. There were intrusions. Full-grown trees randomly invaded the rows of shrubs. A circle of spirea and a smattering of Japanese cherries seemed out of place at the flagstaff court. The courtyard flower beds contained remnants of a red, white, and blue scheme planted for the Nation’s bicentennial. Enough remained of a symmetrical pattern to indicate the area had been formally designed. Unfortunately, the landscape was severely altered by missing or intrusive fragments. Hellmers resolved to restore the landscape's former beauty.

Wishing to accomplish the restoration faithfully, the superintendent was determined not to act arbitrarily. He needed someone to identify elements missing from the original formal landscape, to point out the intrusions, and to determine the intent, or philosophy, of the original landscape designers. He and his staff had neither the time nor the expertise to accomplish the needed research, so he contacted the Midwest Regional Office for assistance. In spring of 1983, Cultural Resources Management Chief Andy Ketterson assigned me the task of preparing what was then known as a historic grounds report (now a cultural landscape report) for the formally landscaped portions of Lincoln Boyhood National Memorial.

Hellmers informed me he wanted to know what was intended by the park's originators, what they designed, and what they built. A bit embarrassed, at first, by my lack of familiarity with the landscape elements, I snatched small samples of plant materials I did not recognize, taped the samples to note cards, and quickly sketched the plants' locations on the cards. Upon my return to Omaha, landscape architect Keith Krueger helped me identify the unfamiliar species. In short time, however, the park staff made me feel quite comfortable in asking anything about which I was unsure, and readily provided answers to my inquiries about plant materials, maintenance techniques, and past and current management procedures.

Research

Once familiar with the landscape and the problems requiring resolution, I employed traditional historical research methods to learn as much as possible about the original design and the designers' philosophy. I began studying reports and records promulgated by those who created the Indiana Lincoln Memorial in the early 20th century. Those

documents gave me a broad familiarity with the project, the time frame, and the key players involved, including noted landscape architect Frederick Law Olmsted, Jr.

Armed with this information, I sought more specific data concerning the Indiana Lincoln Memorial and its framers. From the Library of Congress, I obtained copies of Olmsted's papers related to the project. This collection contained two essential types of documentary evidence: correspondence and landscape designs. The correspondence proved an invaluable source of information concerning the philosophy guiding the memorial landscape's design. Olmsted wrote lengthy letters to the Indiana Lincoln Union (ILU), the quasi-governmental body responsible for establishing the memorial park.

Olmsted's correspondence with the ILU contained detailed discussion of the framers' concept of the park, as well as considerable insight into the feelings of those involved. The collection also contained several of Olmsted's drawings and sketches, which served as a baseline for determining how faithfully the master designer's concepts were followed.

Once the ILU accepted Olmsted's preliminary design, they passed responsibility for development of construction drawings to the Indiana Department of Conservation (DOC), now the Department of Natural Resources. This change resulted in a dramatic decrease in written information concerning how decisions were made; once the project was contained in one office, it was easy to resolve issues in person or by telephone. Nevertheless, the Indiana State Library, Indiana State Archives, and Department of Natural Resources manuscript collections contained valuable information concerning the project, including a wealth of original designs by the two Department of Conservation landscape architects assigned to the project. I obtained copies of Department of Agriculture aerial photographs from 1937 and 1940. In addition, the park museum collection held many documents and photographs relating to the Indiana Lincoln Memorial's establishment, and a scrapbook of historic postcards featuring the park donated by a park neighbor whose husband and father had both worked at the memorial prior to its inclusion in the National Park System.

I searched the files hoping to find a single design representing the landscape which the Department of Conservation eventually put in place. Unfortunately, fate did not make my work that easy. It seems the DOC did not implement any single landscape design, probably because the formal landscape evolved over a 15-year period (1929-1944). I had to reconstruct the events which took place a half-century earlier to determine what the landscape looked like historically. To perform my analysis, I made note cards for each of the designs and summarized which elements were original, which showed up in more than one plan, and which seemed to match existing conditions and/or historic photographs of the memorial grounds.

The types of information I employed in this project were threefold. Documentary sources, including photographs and drawings, provided a firm foundation in the historical record. I used existing conditions at the park to "sort out" elements which appeared on paper but were never implemented, or were implemented in an altered form. Finally, I talked to people. Sometimes using formal interviews, sometimes just chatting about what I was finding and letting my sources tell me what they remembered or surmised, these oral sources helped me formulate hypotheses, test them, and tie the separate pieces of information together.

Recommendations

In addition to the summary of research findings, the historic grounds report contained a section on management recommendations. These recommendations were based on my findings concerning the original intent, design, and implementation, and were developed in accordance to NPS Management Policies and NPS-28, Cultural Resource Management Guideline. Equally important, they were developed in close communication with Superintendent Hellmers and his staff. The park was well aware of what my research had determined, and that I knew the constraints affecting the park's ability to use the research information.

The historic grounds report served other purposes in addition to providing historical background and suggestions concerning future management of the cultural landscape. Once the regional director approved the document and the superintendent elected to implement the recommendations, the document served as a base for the landscape architect assigned the task of preparing construction drawings and specifications.

Equally important, the report provided the Superintendent with an important public relations tool. The restoration of the landscape at Lincoln Boyhood would result in significant change to the appearance of a focal area of the memorial park. Some of the actions required to accomplish the restoration might prove controversial; for example, it would involve the removal of several large trees, some of them healthy. The report explained the rationale for removing all of the original specimens in order to restore the intended uniform appearance of the allee, plaza, and court. It explained why popular ornamentals, such as the Japanese cherries added to the flag court in the 1960s, were not appropriate to the original intent of the memorial grounds and would be removed. Using the historic grounds report, Superintendent Hellmers conducted a public relations campaign that succeeded in winning support for the restoration before demolition and construction work began. The document was also valuable in ensuring that park staff understood the history of the landscaping project and reasons for the change, thus enabling them to add the story to their interpretive programs. In the fall of 1987, the plans were implemented, resulting in the complete removal of all existing vegetation in the landscape area, and the planting of 91 trees, 421 shrubs, and 504 groundcover plants.

The importance of this project goes beyond the immediate goal of restoring the memorial grounds at Lincoln Boyhood National Memorial. Although the details of the research and analysis were, in some ways, unique due to the type of resource under investigation, the lessons of the project are universal. Most restoration projects begin much more subtly; our bolts of lightning are usually figurative, not literal. Many managers and park staff members see things that do not "ring true." The difference, in this case, is that Norm Hellmers did not walk away, or shrug them off. He determined to make the situation right, and to do what was needed to accomplish that goal. That meant research. He stayed involved in the project from its inception to its completion. He used the information to guide the work itself, and to educate the public and his staff concerning the resource, its history and significance, and its restoration. Thus, the research provided direct benefits to the manager and to his park.

Jill York O'Bright is regional historian for the Midwest Regional Office, National Park Service.

AAM Accreditation Program

Patricia E. Williams

The American Association of Museums (AAM) accreditation program recognizes museums that have achieved and maintained professional standards in museum operations and programs. The program was established in 1969 when it became evident that increased funding opportunities, growing leisure time, an expanding educated population and the desire for community-based cultural opportunities had nourished the growth of the museum field. It was clearly time for the museums to look at themselves to determine what the basic standards were for good museum practice. Museums share common goals as part of the informal educational system. They share common characteristics which can be identified, described and measured. It is particularly appropriate that academic accreditation was identified as a good model to follow in developing a peer review program for museums. All of the elements of academic accreditation are incorporated into the museum accreditation system: self study; internal evaluation by staff and governing authority; peer review by a team of qualified museum professionals; and final review by an accrediting body made up of senior museum professionals. Each step in the process is important and has its own positive benefits. In 1986, the National Park Service Director issued a memorandum encouraging NPS areas to seek AAM accreditation and providing NPS-specific procedures to initiate the process. Prior to introducing this initiative, the NPS had sought evaluation of its museum-related functions in the Washington Office and two representative regional offices in conjunction with the accreditation of Independence National Historical Park. This Servicewide review has facilitated subsequent accreditation reviews in individual parks because the reviewers have not needed to examine, in detail, the Servicewide policies and procedures.

Many museum directors cite the self-study phase of accreditation, which can take up to one year, as being of the most immediate help to the museum. Once the self-study is completed, the professional staff members at the AAM review the documents and submit the museum to the Accreditation Commission for its review and action.

This is the first opportunity for the peer review aspect of the program to be employed. The seven-member commission includes: Roy L. Taylor, Director, Chicago Botanic Garden and Chairman, Accreditation Commission; Marena Grant Morrisey, Director, Orlando Museum of Art; Bonnie Pitman-Gelles, Director for Programs, Seattle Art Museum; Dennis Wint, President, St. Louis Science Center, Harold K. Skramstad, President, Henry Ford Museum and Greenfield Village; Kenneth Starr, Director of Programs, National Science Foundation; and Daniel Porter, Director, New York State Historical Association. The Commission members carefully read and analyze the museum's self-study document and inspect all the attachments. Questions or issues that arise at this stage are usually resolved by the on-site evaluation which is the next step in the program. The museum and the AAM staff work together selecting a two-person team to make the on-site evaluation. National Park Service museums are challenging undertakings, especially in the area of governance. The selection of an appropriate visiting committee is particularly critical to maintaining confidence in the program and the final results of the visit—the narrative report.

The Accreditation Commission now reviews the museum for a second time. One member of the commission takes responsibility for thoroughly reading the museum's self-study again and for studying and analyzing the on-site evaluation questionnaire and narrative report. Based on the documentary evidence submitted, the commissioner prepares a recommendation for action which is the basis for discussion by the full Accreditation Commission.

Each phase of the accreditation program is designed to meet three goals: give museums the opportunity to improve their operations and programs; provide a system for reliable and valid review and evaluation; and involve colleagues from the museum field in every level of the review process.

Benefits

It is always a challenge to discuss the benefits of accreditation because they are largely those that the museum creates for itself. Many institutions use it to achieve an increased funding base.

Most museums use the materials provided by AAM to publicize their hard-won accredited status to the press and public. The achievement of accreditation may not bring hundreds of new visitors or thousands of new dollars. However, museums, both public and private, consistently tell us about how accreditation builds confidence, a sense of pride, a feeling of real accomplishment.

The White House accreditation is particularly noteworthy because this museum is cooperatively managed by the White House and the National Park Service with private support coming from the White House Historical Association and advisory guidance from the Committee for the Preservation of the White House. This complex and collegial relationship works very smoothly as was evident in the museum's self-study and on-site evaluation. The accreditation review gave the museum an opportunity to strengthen these cooperative ties and to evaluate their effectiveness. It also gave each participating organization an opportunity to recognize its level of commitment and service to the museum. The positive results of the review gave everyone well-deserved praise.

Museums face enormous challenges: the balancing act between conservation and public use; the demand to carry on research in the face of pressures to do more public programming; the definition and building of appropriate collections with shrinking budgets. Accreditation helps museums to see these issues in perspective and to look at the whole institution in the context of current professional standards. Working toward accreditation can build an incredible sense of institutional teamwork; working to maintain accreditation can sustain the interest and commitment of staff, volunteers and officials.

Accreditation is by and for the museum field. Participation is a way of building ties with the field and achieving an identity for the museum within the profession. National Park Service museums benefit the community both by sharing their methodologies and program approaches with the field and by sharing personnel who serve on the Accreditation Visiting Committee and as consultants in other AAM activities, such as the Museum Assessment Program.

National Park Service accredited museums are in turn benefited by recognition as full players in the museum field, as critical participants and leaders in the effort to conserve and interpret national patrimony, and as worthy of public and private support.

To date, the AAM has accredited 673 museums, including the following NPS areas:

	Year Accredited
Jefferson National Expansion Memorial	1980
Independence National Historic Park	1985
Andersonville National Historic Site	1987
Frederick Douglass National Historic Site	1988
The White House	1988

Other NPS areas are encouraged to contact their regional curators to initiate the accreditation process for their museum-related operations.

Patricia E. Williams is Director of the Accreditation Program for the American Association of Museums.

National Coordinating Committee
for the
Promotion of History

Page Putnam Miller

Since 1982 the National Coordinating Committee has served as the central advocacy office in Washington for the historical and archival professions. Fifty-one constituent member organizations support and participate in the work of the NCC. Although public historians, librarians, political scientists, archivists, and genealogists are members of the NCC, by far the largest segment of the NCC constituency is composed of academic historians. Housed in the American Historical Association building on Capitol Hill, the NCC advocacy program focuses on those Federal policies that have a direct impact on history. These include the policies and funding of the National Archives and the National Endowment for the Humanities, access to historical records, as well as Federal historic preservation policies and the historical component of the National Park Service.

A primary task of the NCC legislative program is to facilitate the exchange of information between government agencies, legislative aides, and professional historical and archival associations. This involves preparation of briefing sheets and legislative updates as well as testifying before congressional committees and providing NCC member organizations with advocacy related services. The NCC works closely with the American Historical Association's Professional Division, the Public History Committee of the Organization of American Historians and the National Council on Public History to increase awareness and appreciation of historic sites. Through a variety of initiatives, the NCC organizations work to promote the preservation, research, and study of historic structures and artifacts that serve as visible reminders of significant events, persons, and movements in this Nation's history.

Whenever appropriate, the NCC urges the National Park Service to place a greater priority on historical research. Research is the foundation necessary for an accurate portrayal of historic events and for adequate preservation of fragile resources. The goal is to both strengthen the historic resources knowledge base and to integrate this information into the total management efforts of the National Park Service. These are points that the NCC has made in Congressional testimony and in comments on National Park Service "Management Guidelines."

Almost three years ago the NCC, the Organization of American Historians, and the National Park Service signed a memorandum of agreement to sponsor a women's history landmark project and the NCC began preliminary work on the Project. Discussion during a 1988 Congressional hearing on the operation of the National Historic Landmarks program and the selection and development of landmark theme studies led the House Committee on Interior and Insular Affairs to recommend that "the National Park Service establish an ongoing and substantial cooperative effort with the major professional and scholarly societies to research and publish National Historic Landmark theme studies." The NCC/NPS collaborative is a demonstration of this recommendation. The goal of the project, "Reclaiming Our Past: Landmark Sites of Women's History," is threefold: to increase the number of National Historic Landmarks that commemorate the experiences of women (less than 5% now focus on women), to develop theme essays that integrate the tangible resources of women’s past with recent scholarship on women's history; and to involve the wider scholarly and preservation communities in the landmark program.

The NCC is based on organizational and not individual membership. Yet individuals do provide essential support for NCC. They do so by encouraging organizations to which they belong to join, and financially support, the NCC; and they participate in various NCC task forces and initiatives. If you have an interest in the women’s landmark project or if there are specific issues regarding the National Park Service or Federal historic

preservation policies that concern you, please let me hear from you. I depend on a wide network of historians and CRM supporters to keep me posted on old and pending matters of concern. My address is 400 A Street, SE, Washington, DC 20003.

Page Miller is Director of the National Coordinating Committee.

Dogwatch

James P. Delgado

"Dogwatch" is the term traditionally used for the two-hour watch during which half the ship's crew eats supper and swaps stories.

Throughout history, ships were built without detailed plans. At best, naval architects drew "line" plans that delineated the form of a ship's hull; deck plans that showed the layout of deckhouses, hatches and equipment; rigging plans that documented spars and sails; and with the advent of steam, engine plans were prepared. By the mid-19th century, the intricacies of steam propulsion and iron and steel shipbuilding combined to make shipbuilding more science than art, resulting in the preparation of more drawings and plans of vessels. Even today, though, most vessels are still built without plans.

Even when drawn, plans of ships fail to capture every detail, particularly the means by which the vessel is constructed. Plans also often represent what was initially desired by the shipbuilder, not what was built. Changes to a vessel can be understood only by comparing drawings of modifications and repairs to a ship that were done over time. Large, bulky, difficult to conserve and curate, sometimes surviving as archivally unstable "blueprints," ship plans are a dwindling resource. Many of the historic vessels preserved in the United States have few if any plans, making restoration difficult. The only record of these vessels is the ship itself, and should it sink, burn, or fall apart, an irreplaceable part of the past is lost forever.

Guidelines

During a 14-month period in 1936-37, the Historic American Merchant Marine Survey (HAMMS) drew and photographed 426 vessels in the United States. In 1989, only one of the 426 survives, clearly demonstrating the fragile nature of historic ships. The only record that survives for many of the others is the HAMMS drawings. That fact is not lost on the Nation's maritime preservation community, who pushed for a revival of HAMMS and for guidelines to record historic ships. As part of the Congressionally mandated "National Maritime Initiative," the NPS, working with the National Trust for Historic Preservation and the maritime community "revived" HAMMS under the auspices of the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER). In cooperation with the Calvert Marine Museum, Mystic Seaport, the Shelburne Museum, Northwest Seaport, and San Francisco Maritime National Historical Park, HABS/HAER teams under the direction of Richard K. Anderson, Jr., documented the historic ships *Wawona, Louise Travers, Ticonderoga, Alabama,* and *Balclutha* between 1985 and 1988. Drawing on this experience and HABS/HAER's years of expertise in documenting historic structures and engineering, NPS released the long-awaited *Guidelines for Recording Historic Ships* in January 1989. The Guidelines discuss the preparation of historical context studies, historical reports, case studies, documenting ships with large-format photography, and the preparation of measured drawings. Lavishly illustrated with HAMMS and HABS/HAER drawings, and replete with examples of completed work, the guidelines are an absolute necessity for maritime preservationists, historians, naval architects, maritime archeologists, and preservation agencies and organizations who are studying, documenting, restoring or rehabilitating historic ships.

The Guidelines are available, free of charge, and can be obtained by writing HABS/HAER, National Park Service, P.O. Box 37127, Washington, DC 20013-7127.

Jim Delgado is the maritime historian in the History Division, National Park Service, Washington Office.

Preservation Technology Update
NPS Preservation Technology Publications

Kay D. Weeks

Mandate for technical information. Issued in 1971, Executive Order 11593 ("Protection and Enhancement of the Cultural Environment"), directed the Secretary of the Interior to "develop and make available to Federal agencies, State and local governments, private organizations and individuals information concerning professional methods and techniques for preserving, improving, restoring, and maintaining historic properties." This mandate was expanded in the 1980 amendments to the National Historic Preservation Act of 1966: Section 101(h) called for the development of technical information for other nations and international organizations and stipulated that training be provided for administrators of the historic preservation program at the Federal, State, and local levels.

In response, 70 titles since 1973. Responding to this mandate, the NPS established a separate office, the Preservation Assistance Division, to develop preservation standards, guidelines, and technical information; its first technical report, a 38-page, typewritten paper on the use of rectified photography for working drawings, surveys, and feasibility studies was published in 1973. Now, some 15 years later—supported both by the strengthened 1980 Act and the continuous technical editorship of Lee H. Nelson, FAIA—the office claims nearly 70 preservation guidance publications (technical briefs and reports, case studies, and cooperatively produced handbooks and workbooks). While consciously tailoring publication formats to audiences of differing conservation skills and interests, the guidance consistently reflects and underscores the philosophy expressed in the Secretary of the Interior's Standards.* Today's list of 70 also includes the more "administrative" publications that describe and explain program activities—leaflets and bulletins on the Tax Incentives and National Historic Landmarks programs, publication catalogs, routinely updated fact sheets and, of course, the Standards and Guidelines themselves. Most recently added was a skills development training handbook targeted to historical architects and other preservation professionals within the Park Service.

Readership has grown over the years as well—in large measure due to the popular Preservation Tax Incentives Program—from a "core audience" of Federal agency managers, State Historic Preservation Officers, and National Historic Landmark owners to a broad nationwide constituency of historic property owners, architects, developers, contractors, historic preservation commissioners, and students.

Finally, the change in distribution practices during the 15-year program is well worth mentioning. In the 70s and early 80s the Division routinely printed 20,000-40,000 copies of each Preservation Brief for distribution to its mandated audiences, then reprinted annually in numbers equally as high. The Standards and Guidelines were distributed in figures approaching 200,000. Then, toward the mid-1980s it became increasingly clear that the high cost of printing coupled with the growing number of publications in print was making free distribution an economic impossibility. (Today, for example, it costs about as much to reprint 8,000 Briefs as it did to reprint 15,000 in the earlier program years.) In the more recent years of limited free distribution, Preservation Assistance Division has turned increasingly to sales as an alternative to free distribution, and the Superintendent of Documents, U.S. Government Printing Office (GPO) as its sales outlet of choice. GPO prices are low, particularly when publications are ordered in quantity. Currently, the Division has 26 publications at GPO; the others are sold by the Department of Commerce's National Technical Information Service, the National Trust for Historic

Preservation, the American Association for State and Local History, and the Historic Preservation Education Foundation.

Preservation guidance for every audience. Several technical information categories have subsequently evolved to distinguish between types of subjects being explained, levels of technical difficulty, and audiences of differing preservation skills and interests:

Preservation Briefs: Short, illustrated essays in bulletin form intended to build general preservation awareness on broad issues. 18 Briefs to date, including guidance on sandblasting, interior rehabilitation, use of substitute materials, and new exterior additions. Newest titles include **PB 15: Preservation of Historic Concrete** by William B. Coney, AIA; **PB 16: The Use of Substitute Materials on Historic Building Exteriors** by Sharon C. Park, AIA; PB 17: **Architectural Character-Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character** by Lee H. Nelson, FAIA; and **Character-Defining Elements** by H. Ward Jandl.

Technical Reports: Book-length essays that address more sophisticated and sometimes experimental preservation and conservation methodologies, targeted to architects, engineers, government officials, and other technicians involved in the preservation of historic buildings. 13 titles to date, newest is **Keeping it Clean: Removing Dirt, Paint, Stains, and Graffiti from Historic Exterior Masonry** by Anne E. Grimmer.

Preservation Case Studies: Solution-oriented information for developers, planners, and owners focusing on one building or a block of buildings. 8 titles, newest is **The Interior Building - Its Architecture and Its Art** by David W. Look and Carole L. Perrault. Available from GPO.

Preservation Tech Notes: Short, illustrated essays providing innovative solutions to specific problems encountered in preserving or rehabilitating cultural resources. 22 titles to date; primarily distributed in the CRM Bulletin. Also sold as part of PAD's Co-Publications (see below).

Training Handbooks and Workbooks: Specially prepared for national conferences on preservation technology (Window Conference, 1986; Interiors Conference, 1988). These 100 to 400 page notebooks are cooperatively published with leading preservation organizations. Newest titles include **The Interiors Handbook for Historic Buildings; The Window Handbook: Successful Strategies for Rehabilitating Windows in Historic Buildings; and the Window Workbook for Historic Buildings.** Each is available from the Historic Preservation Education Foundation. For ordering information, call Chuck Fisher: (202) 343-9568. The **Skills Development Plan for Historical Architects in the National Park Service** is a 96 page guide outlining the self-paced training program for architects and other preservationists with the goals of studying a topic, writing about it, and sharing information with an audience of peers.

For a **Catalog of Historic Preservation Publications** (a complete list of GPO, other sales, and free publications developed by the Cultural Resources Programs), write: CRM Bulletin, ATTN: Kari Koester.

Seeking authors of new technical publications. Technical preservation publications are developed by WASO staff, the NPS regions, and private sector preservationists. The Preservation Assistance Division encourages "outside" authors to

contribute their expertise in the development of technical information. For further information, contact Division at 202-343-9578.

*"The Secretary of the Interior's Standards for Historic Preservation Projects (1979)" include general and specific Standards for the treatments acquisition, protection, stabilization, preservation, rehabilitation, restoration, and reconstruction. "The Secretary of the Interior's Standards for Rehabilitation with Guidelines for Rehabilitating Historic Buildings (Rev. 1983)" is issued as a separate publication.

Computer News

Betsy Chittenden

It's no secret that the use of computers and computerized information management systems in the Service has increased rapidly over the last several years. The Cultural Resources programs have been no exception, with information systems proliferating Servicewide. Consider the major systems already either running or under development: there are four primary resource inventories (ANCS, CSI, LCS, and NRIS), two major bibliographic databases (NADB reports and CRBIB), several project inventories (such as NADB projects and HABS/HAER), several special resource-type inventories (such as Spanish Cultural Heritage and National Maritime Inventory), on-line information retrieval systems (such as the Historic Structures Preservation Database), and dozens of other small and medium-sized systems. Major servicewide systems such as COMMON and Maintenance Management also have cultural components.*

With the increase in the use of these important tools has come the increased risk of collecting redundant information or information for which there is no well-defined use, overloading users with numerous different but overlapping systems, developing inaccessible systems, and other problems that result from a lack of coordination. To work on existing problems and head off others before they occur, the Associate Director established a full-time position of Cultural Resources Information Management Coordinator (IMC). This is the first time that a full-time position has been created to coordinate information management, an important step in recognizing the place of computers in the NPS.

In accepting the job of Cultural Resources IMC, I realized that since this is a new function, much of the job is undefined and the mechanisms to carry out coordination functions are still being developed. For example, the data dictionary process, by which we hope to standardize and coordinate cultural resource information, is laid out on paper but still needs to be tested and refined as a working process. Over the next year, I will be working closely with concerned offices and individuals to map out overall information management strategies, develop processes such as data dictionary, and open communication channels to all areas of the National Park System and the National Register programs community. Along with working on the information systems and databases themselves, I will also be concentrating on the "people" side of computers—how personnel and technical support combine to turn software and computers into true information systems.

As a starting point, attached is a draft mission statement for the Cultural Resources IMC function. For the moment this will serve as our working standard as we get specific activities going. Your comments on the draft are welcome. Over the next few months as we begin major work on both the data dictionary and long-range strategic information management planning, you can expect to hear much more about information management in the NPS. I plan to use the *CRM Bulletin* to report accomplishments, raise issues for which I will need feedback and input from you, and to communicate general information about information systems in WASO and servicewide. In return, I hope to hear from all of you about any and all issues related to information management systems. We need to be discussing both our successes and our failures, in order to really put computers to work for us in the NPS. Your input and support will be critical as we work to develop the mechanisms that will help all of us get the most out of our information management systems, and to serve the public as efficiently as possible. I can be reached at FTS 343-9521, or Mail Stop WASO 413.

Cultural Resources Information
Management Coordination Function
Draft Mission Statement

The Service recognizes the central role that information management, particularly automated information, plays in achieving its mission. The mission of the cultural resources information management coordination function is to enhance the usefulness of cultural resources information management systems by:

—promoting consistency, compatibility, accessibility and transportability of information in cultural resources information management systems throughout the Service;

—promoting consistency, compatibility, accessibility and transportability of information between Service cultural resources information management systems and other organizations, including Federal and state historic preservation programs, private cultural resources programs, and others;

—ensuring that when information systems are being developed or revised, that their value to others in the Service and the larger cultural resources community, including the public, shall be recognized, and incorporated into their design whenever possible; and

—minimizing the cost of developing and maintaining information, and maximizing its usefulness and accessibility to the widest possible appropriate audience.

These objectives are to be attained using methods appropriate to the dispersed nature of information and the cultural resources community, including coordination, communication, cooperative intra- and interagency standardization mechanisms such as data dictionaries, and information exchange mechanisms such as users groups.

*ANCS - Automated National Catalog System

CSI- Cultural Sites Inventory

LCS- List of Classified Structures

NRIS- National Register Information System

NADB- National Archeological Database

CRBIB- Cultural Resources Management Bibliography